Drug Lab Dump Site Hazards

2022 Michigan Highway Maintenance Conference

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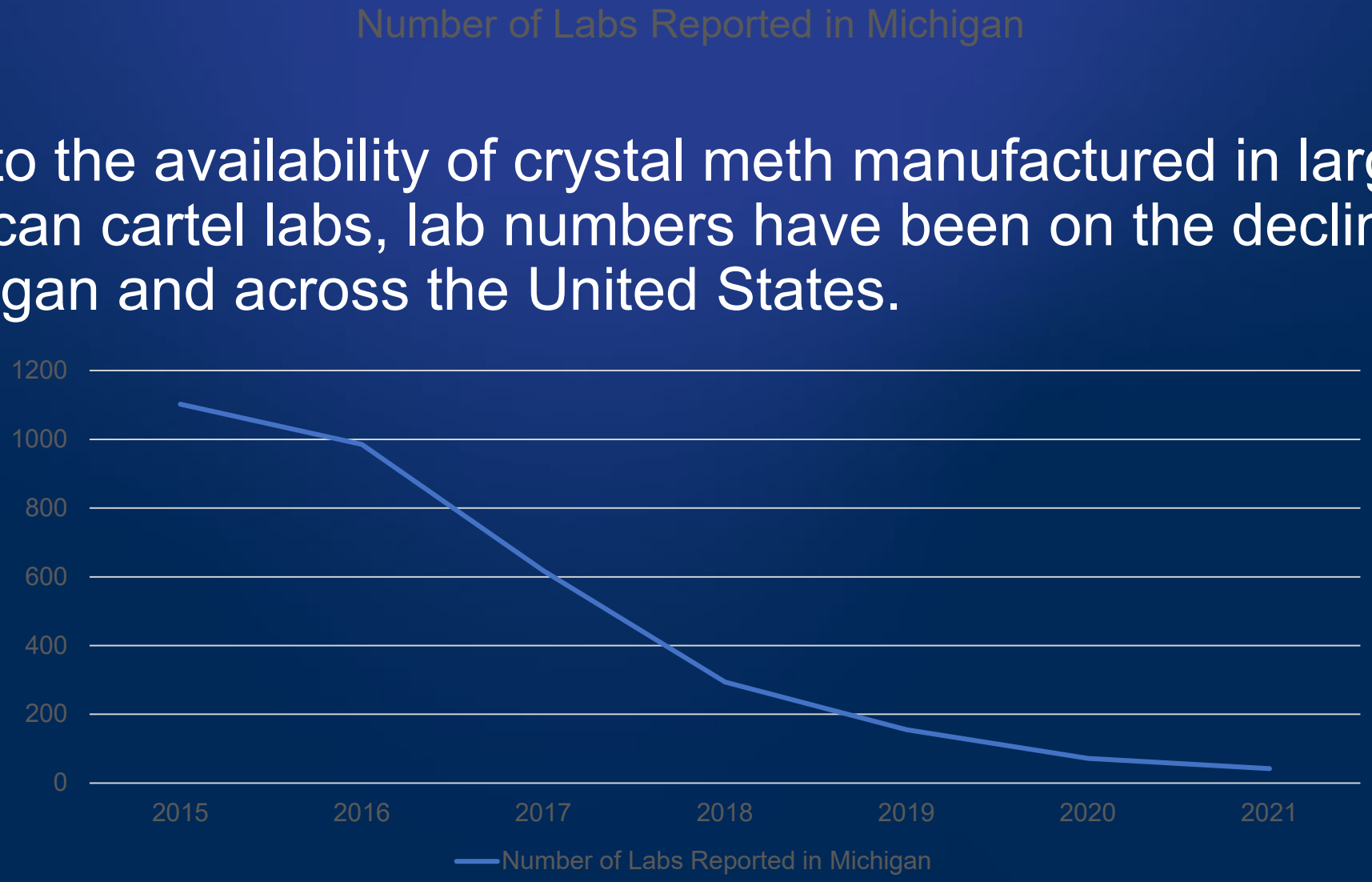
Drug labs in Michigan

- Meth labs are the most common drug lab that law enforcement responds to in Michigan, although the number of labs has been dropping rapidly over the last five years.
- With the help of YouTube and your local Wal-Mart, anyone can become a home chemist.
- Michigan has historically ranked in the top five states in the US for meth labs.

The History of meth

- Methamphetamine was first synthesized in 1893 by the famed Japanese chemist Nagai Nagayoshi.
- Strangely enough, Nagayoshi also invented some of the world’s first herbicides.



- Due to the availability of crystal meth manufactured in large Mexican cartel labs, lab numbers have been on the decline in Michigan and across the United States.

Cooking meth in the United States

- There are three generally recognized methods of synthesizing meth that we see in Michigan and the United States.

- Red Phosphorus method (70's biker dope)
- Ammonia method (Nazi or Birch method)
- One Pot method ("shake-n-bake" or bottle dope)

- All three methods produce meth but have different chemistry and hazards.

Types of clandestine labs

- Extraction
- Synthesis
- Conversion

Extraction labs

- Pseudo extraction for meth cook
- THC extraction for BHO lab
- DMT extraction
- Red Phosphorus

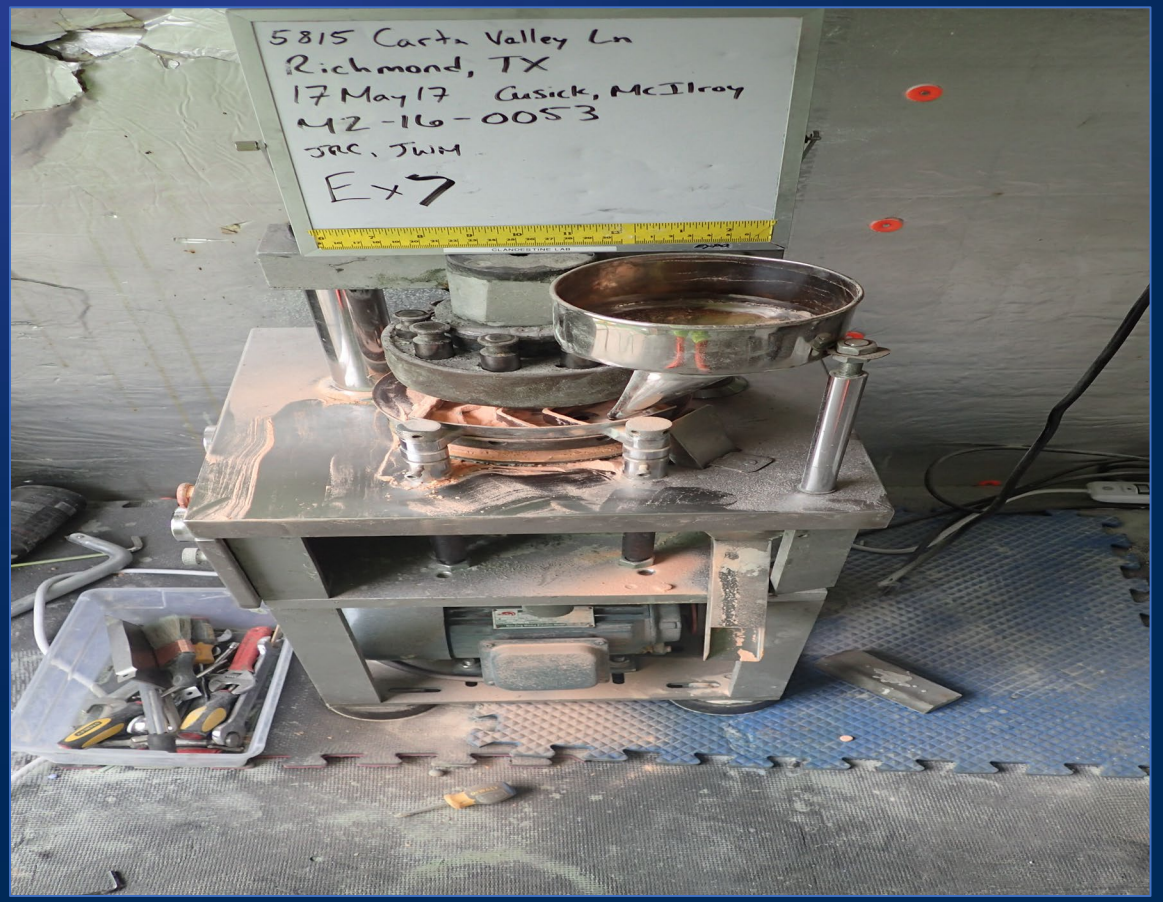
Synthesis labs

- Methamphetamine
- MDMA
- LSD
- Fentanyl

Conversion labs

- Meth recrystallization labs
- Crack cocaine from powder

Cutting labs or Pill Mills



Pseudoephedrine

- Pseudoephedrine is the precursor for meth labs found in the United States
- Pseudoephedrine is chemically very similar to methamphetamine and can be easily converted by drug cooks
- Pseudo is no longer an over-the-counter purchase and sales are tracked, making it a bit more challenging for the cooks

Both Ammonia and One Pot meth cooks use similar ingredients

- Anhydrous Ammonia
- Ephedrine or Pseudoephedrine
- Water reactive metal/Lithium
- Water
- Solvents such as camp fuel, white gas or ether
- Sulfuric Acid
- Salt
- Aluminum Foil
- Ammonium Nitrate
- Drain cleaner/Sodium Hydroxide
- Coffee Filters
- Plastic bottles and tubing
- Tools such as piper cutters, pliers
- Funnels
- Glass dishes and pans
- Acetone

Clandestine meth labs in Michigan

- Ammonia Method

- One-Pot Method

Advantages of the Ammonia method

- Quick
- Easy
- Cheap
- Readily available ingredients

Disadvantages of Ammonia method

- Availability of ammonia is regional (rural communities)
- Limit of production capacity
- Use of liquid ammonia is very dangerous…


Dräger

Ammonia will corrode the brass fittings as well as the walls of a propane tank

Per MSP policy, compressed gas cylinders suspected to contain ammonia require a bomb squad and HAZMAT contractor.

Metal Sources for the Ammonia Cook

- Lithium
- Sodium
- Potassium

Lithium metal is usually stripped from batteries

Sodium metal is water reactive as well

Potassium is highly reactive

One Pot meth lab method

Advantages of the One Pot method

- The reaction is carried out in one container and can be concealed
- No stealing anhydrous ammonia
- Less smell draws less attention from your neighbors
- All components are commercially available
- Reaction vessels can be thrown out once the cook is done leaving little evidence of manufacturing

Disadvantages of the One Pot Cook

- The cooking process takes a bit longer and requires monitoring
- Small production capacity
- Failing to follow the recipe can lead to failures
- One pots are unpredictable, highly flammable and dangerous…

One Pots often fail causing catastrophic flash fire events

Meth Lab Dump Sites

- Meth cooks often discard their trash and lab waste by tossing it in ditches when driving down the road.
- The majority of dump sites are reported to law enforcement during the spring after the winter snows have thawed.
- Abandoned lab waste is generally not still reactive, but the chemicals can still pose a threat to the public.
- “Dry” One Pots have been known to catch fire well after the cook when remaining lithium metal is exposed to water.

HCL Gas Generators

- Makeshift HCL gas generators are used in both the Ammonia and One Pot method in the final steps of the cook.
- Common household ingredients are combined in bottles to produce Hydrogen Chloride gas, which is forced through plastic tubing out of the top of the bottle.
- Hydrochloric Acid is very irritating and can burn your eyes, throat and lungs.


ICELAND
PURE
Spring Water


ROTO-ROOTER


RED DEVIL
LYE
DRAIN OPENER


suphedrine


PENNZOIL
10W-30

BHO extraction labs

Biggest hazards for MDOT workers

- Flammability of One Pot labs
- Ammonia gas leaking from unauthorized containers
- Glass reaction vessels that can fail and shoot shards of glass everywhere
- Strong acids and bases can quickly cause chemical burns and serious tissue damage
- Damaged or cracked lithium batteries create fire hazards

What to do if you find a suspected lab dumpsite

- Try to identify what you have found from a safe distance (Upwind, Uphill, Upstream) and take photos with your phone if you can.
- Contact law enforcement to report the potential drug lab dumpsite.
- MSP Operations is staffed 24/7 and can be contacted to initiate a clan lab response

MSP Operations

800-525-5555 or 989-732-5141

MSP Methamphetamine Unit

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Questions?


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